

DEQ AIR QUALITY PROGRAM 1410 N. Hilton, Boise, ID 83706 For assistance, call the

Air Permit Hotline - 1-877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION Revision 2

Revision 2 4/5/2007

Company Name:	Hoku Materials, Inc	749 <u>- 1</u> 20	
Facility Name:			Polysilicon Plant
Facility ID No.:			005-00058

Brief Project Description:	on: Construction of a 4,000 Mton/yr Polysilicon Production Facility SUMMARY OF FACILITY WIDE EMISSION RATES FOR CRITERIA POLLUTANTS - FUGITIVE SOURCES												
(i		ARY OF FA	CILITY WID	E EMISSION	I RATES FO	R CRITERI			TIVE SOUR	CES			
1.	2.			5/		KI7	3	c.	<u> </u>	Vo	<u> </u>	Lea	id
Fugitive Source Name	Fugitive ID		A ₁₀	S0 lb/hr	T/yr	lb/hr	O _X T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
i agitive oodite italiie	r ugitive ib	lb/hr	T/yr	ID/III	Fugitive S		1791	IDIII	1771	10/111	1771	1,07111	
Cleaning	13						garantan parama Katan katan dari			0.46	2.00	in Albania Description	
name of fugitive source2													
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name of fugitive source19													
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ame of fugitive source21													
insert more rows as needed)													
'otal										0.46	2.00		

	DEQ AIR QUALITY 1410 N. Hilton, Boi For assistance, cal Air Permit Hotline	se, ID 83706 I the		Please see instru	ictions on page	e 2 hefore filling	out the form		Р	ERMIT TO	CONSTRI	UCT APPL	Revision 2 4/5/2007
				icase see manu	ionono on pag	C E DOIGIC MAIN	out the rollin.						
Company Name:	Hoku Materials, li	1C			44.4								
Facility Name:	efectoficilizat e	the second second				Po	lysilicon Plant			a the			
Facility ID No.:	and the second of the second o						005-00058						gen en
Brief Project Description:	Construction of a	,000 Mton/yr F	Polysilicon Pro	duction Facility	Administration				200		an many militaria	Section 1	
Particular in the second secon	SUMM	ARY OF FA	CILITY WID	DE EMISSION	N RATES F	OR CRITERI	A POLLUTA	ANTS - FUG	ITIVE SOUF	RCES			
1.	2.							3.					
		PI	A ₁₀	S	O ₂	l N	O _X	C	0	V	oc .	Le	ad
Fugitive Source Name	Fugitive ID	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
					Fugitive S	Source(s)							

Instructions for Form EI-CP2

his form is designed to provide the permit writer and air quality modeler with a summary of the criteria pollutant emissions of each emission unit/point located at the facility. This nformation may be used by the IDEQ to perform an air quality analysis or to review an air quality analysis submitted with the permit application or requested by the IDEQ.

Please fill in the same company name, facility name, facility ID number, and brief project description as on form CS in the boxes provided. This is useful in case any pages of the application get eparated.

ugitive emissions are those emissions that cannot reasonably be made to pass through a stack or vent or equivalent opening. Examples include coal piles, unpaved roads, etc. Fugitive emission ources at your plant must be included in this form.

- . Provide the name of all fugitive sources at the facility. This name must match names on other submittals to IDEQ and within this application.
- . Provide the identification number for the fugitive source. This ID number should match ID numbers on other submittals to IDEQ and within this application.
- . Provide the emission rate in pounds per hour and tons per year for all criteria pollutants emitted by this fugitive source. In this form, emission rates for a fugitive source are the maximum allowable emissions for both short term (pounds per hour) and long term (tons per year). These emission rates are its permitted limits (if any). Otherwise, potential to emit should be shown. Potential to emit is defined as uncontrolled emissions at maximum design or achievable capacity (whichever is higher) and year-round continuous operation (8760 hours per year) if there are no federally enforceable permit limits on the emission point. If the emission point has or will have control equipment or some other proposed permit limitation such as hours of operation or material usage, then, the control efficiency or proposed permit limit(s) may be used in calculating potential to emit.

OTE: Attach a separate sheet of paper, or electronic file, to provide additional documentation on the development of the emission rates. Documentation can include emissions factors, iroughput, and example calculations.



PERMIT TO CONSTRUCT APPLICATION Revision 3 4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name:	Hoku Materials, Inc	ecentra a competiti de attenta do com	And the attack of the	المعلى والمراكز فياد جوال المعال الصويل
Facility Name:		and the term	week and the second of the second of the	Polysilicon Plant
Facility ID No.:	entre en en la compaña de	. La Selection de la company de la com-	and the second s	005-00058
. wolley 10 110	 Management for the accompanies of the development of the property of 	and the state of the	the country of the second control of the second of the sec	

Brief Project Description: Construction of a 4,000 Mton/yr Polysilicon Production Facility

Bile! Floject Description.	SUMMAR	Y OF EMISS	IONS INCR	EASE (PRO	POSED PT	E - PREVIOL			POINT SO	URCES			
1.	2.	PN	40	SC) <u>,</u> [NC	3)√ I	C(0 1	VC	oc I	Lea	ad
Emissions units	Stack ID	lb/hr	T/yr	lb/hr	T/vr	lb/hr	^ T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
			,		Point Sou								
3oiler	100	0.11	0.48	0.01	0.04	1.43	6.26	1.20	5.26	0.08	0.34	0.00	0.00
lot Oil Heater		0.11	0.48	0.01	0.04	1.43	6.26	1.20	5.26	0.08	0.34	0.00	0.00
/I.G. Silicon Bin Vent	3	0.05	0.22				garage a garage						
/I.G. Silicon Primary Hopper	4	0.01	0.04				ara d						
I.G. Silicon Secondary Hopper	5	0.01	0.04										
ime Storage Silo	.6	0.19	0.34										
Cooling Tower	7	0.74	3.22										l
aboratory Venting System	8	0.05	0.20	0.05	0.20	0.28	1.20						
Chlorosilane Venting System	9	0.69	3.01										
Relief Vent System	10	0.27	1.20										<u> </u>
Emergency Generator	11	0.94	0.23	5.42	1.35	32.16	8.04	7.37	1.84	0.96	0.23		
ire Water Pump	12	0.66	0.17	0.61	0.15	9.30	2.33	2.00	0.50	0.74	0.18		
ame of the emissions unit13													
ame of the emissions unit14													
ame of the emissions unit15													
ame of the emissions unit16													
ame of the emissions unit17													
ame of the emissions unit18													
ame of the emissions unit19													
ame of the emissions unit20													
ame of the emissions unit21													
nsert more rows as needed)													
otal		3.81	9.61	6.10	1.78	44.60	24.08	11.77	12.86	1.85	1.11	0.00	0.00

	DEQ AIR QUALIT	Y PROGRAM		1					PI	RMIT TO	CONSTR	UCT APPL	ICATION
	1410 N. Hilton, Bo												Revision 3
	For assistance, ca	II the											4/5/2007
	Air Permit Hotline	e - 1-877-5PER	MIT										
			P	lease see instr	uctions on pag	e 2 before fillin	g out the form.						
Company Name:	Hoku Materials, I	nc	and the second second	and the second of the second of the	en en en en en en en en en		and the second second	52.5		355 WW.	1,47327.63	**5.4	
Facility Name:	Secretary and		Katawa an ilai			Po	lysilicon Plant	and the second		San San San San San San			
Facility ID No.:	and the contract of the contract of	Lancest street, earlies	and the second	. asteriotics of as		أغير والجرائد يساورها مروضي	005-00058	enance excess		La Company			
Brief Project Description:											April 10 Apr	ung Kebilagan Jumper D	on a superior of the second
	SUMMAR	Y OF EMISS	SIONS INC	REASE (PRO	DPOSED PT	E - PREVIO	USLY MOD	ELED PTE)	- POINT SO	URCES			
1.	2.						3	3.					
		PN	1 ₁₀	S	O ₂	N	O _X	C	:0	V	C	Le	ad
Emissions units	Stack ID	lb/hr	T/vr	lb/hr	T/vr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
	•				Point Sc	urco(e)							

Instructions for Form El-CP3

This form is designed to provide the permit writer and air quality modeler with a summary of the change in criteria pollutant emissions of each emission unit/point associated with his permit application. This information may be used by the IDEQ to perfo

Please fill in the same company name, facility ID number, and brief project description as on form CS in the boxes provided. This is useful in case any pages of the application get separated.

- I. Provide the name of the emission unit. This name should match names on other submittals to IDEQ and within this application.
- ?. Provide the identification number for the stack which the emission unit exits.
- 3. Provide the increase in emissions in pounds per hour and tons per year for all criteria pollutants emitted by this emission unit. In this form, increase in emissions for an emission unit are the proposed PTE Previously modeled PTE. If the emis

IOTE: Attach a separate sheet of paper, or electronic file, to provide additional documentation on the development of the emission rates. Documentation can include emissions factors, aroughput, and example calculations.



1410 N. Hilton, Boise, ID 83706 For assistance, call the Air Permit Hotline - 1-877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Revision 3 4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name: Hoku Materials, Inc
Facility Name: Polysilicon Plant
Facility ID No.: 005-00058

Facility Name:	Paga sayan sa	Francisco (Company)	parties a series and construction	er europe CANAGE en con		Po	lysilicon Plant	Street and the street		Le la central	e e	* and ***	
Facility ID No.:	an disatipana, an	005-00058 Construction of a 4,000 Mton/yr Polysilicon Production Facility											
Brief Project Description:	Construction of a 4 SUMMARY				PASED BTE	PREVIOU	SI V MODEI	EN DIE\	HIGHTIVE S	OURCES	litan energy en ee een	and the second second	<u> Same Halana Silahar</u>
	SUMMART	OF EMISSI	ONS INCRE	ASE (PROP	OSEDFIE	- PREVIOU		-37 61 (3) 61 3.	-OGITIVE S	OUNCLS			
1.	2.				Air Pollut	tant Maximu	ım Change i		s Rate (lbs	hr or t/yr)			
11.00		Pi	/I ₁₀	s	O ₂	N	O _x	С	0	VC	С	Lead	
Fugitive Source Name	Fugitive ID	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
					Fugitive S	ource(s)							
Cleaning	13			Y/2017 2017	F4557		3.3577.45A			0.23	1.00		
name of fugitive source2	ida matangi	and annual soluti	and the same of the A	adam adam.			The same of the sa	Washing .		1		and the second	
name of fugitive source3		11574 ber 2011 al	5 a	gaettaere e				en a	and the same of	37,5135			
name of fugitive source4								100					
name of fugitive source5													
name of fugitive source6										201500			
name of fugitive source7													
name of fugitive source8													
name of fugitive source9													
name of fugitive source10													
name of fugitive source11			·										
name of fugitive source12													
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ame of fugitive source18													
ame of fugitive source19													
ame of fugitive source20													
ame of fugitive source21													
insert more rows as needed)													
otal										0.23	1.00		

T/yr

	1410 N. Hilton, Boi For assistance, call Air Permit Hotline	se, ID 83706 I the							Pl	ERMIT TO	CONSTR	UCT APPL	Revision 3 4/5/2007
			Р	lease see instr	uctions on pag	e 2 before fillin	g out the form.						
Company Name:	Hoku Materials, In	1C		44.000									
Facility Name:	Starte Official Latin	fitting and the second		Adams		Po	lysilicon Plant			and the second			
Facility ID No.:			Loren Laurence	and the second		2012 FT 34 13	005-00058	المعي المستدين والعا		1,11,500			
Brief Project Description:	Construction of a 4						ANTAN ANTAN				Charles and a second		ense y modern
	SUMMARY	OF EMISSI	ONS INCRE	ASE (PRO	POSED PTE	- PREVIOL	SLY MODEL	ED PTE) - I	FUGITIVE S	OURCES			
1.	2.				Air Pollu	tant Maxim	3 um Change i	in Emission	ıs Rate (Ibs	/hr or t/yr)			
		PΝ	A ₁₀	s	6O ₂	· N	O _X	С	0	V	oc	Le	ad
Fugitive Source Name	Fugitive ID	lh/hr	T/vr	.lh/hr	T/vr	lb/hr	T/vr	lb/hr	T/vr	lb/hr	T/vr	lb/hr	Т/уг

Fugitive Source(s) Instructions for Form El-CP4

lb/hr

T/yr

lb/hr

T/vr

This form is designed to provide the permit writer and air quality modeler with a summary of the change in criteria pollutant emissions of each emission unit/point associated with this permit application. This information may be used by the IDEQ to perform an air quality analysis or to review an air quality analysis submitted with the permit application or requested y the IDEQ.

Please fill in the same company name, facility name, facility ID Number, and brief project description as on Form CS in the boxes provided. This is useful in case any pages of the application get eparated.

. Provide the name of the emission unit. This name should match names on other submittals to IDEQ and within this application.

Fugitive Source Name

Fugitive ID

lb/hr

. Provide the identification number for the fugitive source. This ID should match IDs on other submittals to IDEQ and within this application.

T/yr

lb/hr

Provide the increase in emissions in pounds per hour and tons per year for all criteria pollutants emitted by this fugitive source. In this form, increase in emissions for an emission unit are the proposed PTE - Previously modeled PTE. If the fugitive source has or will have control equipment or some other proposed permit limitation such as hours of operation or material usage, the control efficiency or proposed permit limit(s) may be used in calculating proposed potential to emit.

IOTE: Attach a separate sheet of paper, or electronic file, to provide additional documentation on the development of the emission rates. Documentation can include emissions factors, roughput, and example calculations.



Revision 3 03/26/07

				IDENTIF	ICATION									
Company Name:	Н	oku Mate	rials, Inc.	Facility Name: Po	lysilicon Plant	Program vitaria en la capación de la como de La como de la como de	Facility ID No.: 0	05-00058						
Brief Project Description	1: Co	onstructio	n of a 4,0	000 Mton/yr Polysilicon Prod	uction Facility									
IDENTI	FICATION	And the second second			SCRUBBER									
1.	2.	3.	4.	5.	6.	7.	8.	9	10.					
Emission Unit	EU ID No.	CE ID No.	Stack ID No.	Manufacturer Name	Model No.	Туре	Dimensions In Feet (Ht x Dia x L)	Water Flow (gpm)	Pressure Drop (in H ₂ O)					
Lab Scrubber	8	8	8	TBD	TBD	Venturi and/or Spray Chamber	TBD	TBD	TBD					
Chlorosilane Scrubber	9	9	9	TBD	TBD	Venturi and/or Spray Chamber	TBD	TBD	TBD					
Relief Vent Scrubber	10	10	10	TBD	ТВО	Venturi and/or Spray Chamber	TBD	TBD	TBD					
	uanto. a				1									
0.000														



Revision 3 04/02/07

				IDENTIF	ICATION					
Company Name: Proj Des	aterials, In scription: Polysilicor	Construct	tion of a 4 ion Facili	1,000 Facility Name: Po	olysilicon Plant			cility No.: 005-0	00058	
Brief Project Description				All Control of the Co		ر الله الأنائل البراية	en de la companya de La companya de la co	<u> </u>	; : 1.550.ee.	
IDENTI	FICATION			В	AGHOUSE		BAG	S		
1.	2.	3.	4.	5.	6. 7.				10.	11.
Emission Unit	EU ID No.	CE ID No.	Stack ID No.	Baghouse Manufacturer	Baghouse Model No.	Туре	Туре	Size (Dia x Ht)	No. of Bags	Air to Cloth
M.G. Silicon Bin Vent	3	3	3	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Lime Storage Silo	6	6	6	TBD	TBD	TBD	TBD	TBD	TBD	TBD
				gandrik Eller I.		<u> </u>			. weight elemen	
		12								
					19 (19) 10 (19) 10 (19)					



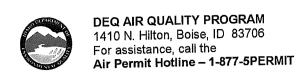
Revision 3 03/27/07

Please see instructions on pag	e z belole i					
			DENTIFICAT	ION		
Company Name:		Facility N	Name:		Facility I	
Hoku Materials, Inc.		Polysilic	on Plant		005-000	58
Brief Project Description:		Construc	ction of a 4,00	0 Mton/yr Pol	ysilicon Productio	n Facility
EM	ISSIONS U	NIT (PROC	ESS) IDENT	IFICATION &	DESCRIPTION	
1. Emissions Unit (EU) Name:	CHLOR	OSILANE VEN	ITING SYSTEM			
2. EU ID Number:	9					
3. EU Type:	☐ New 図 Modif	Source ication to a Pe	Unpermitted Exermitted Exermitted Source	isting Source - Previous Permi	t#:P-2007-0075	Date Issued: 8/14/07
4. Manufacturer:	TBD	17				
5. Model:	TBD				Algebra	
6. Maximum Capacity:	TBD					
7. Date of Construction:	MAY 1, 3	2008				
8. Date of Modification (if any)	MAY 1,					
9. Is this a Controlled Emission Unit	? No				If No, go to line 18.	
				EQUIPMEN	T	
10. Control Equipment Name and ID:		Chlorosilane	T	ID No:9□		
11. Date of Installation:		8/14/07	12. Date of Mod	dification (if any):	May 1, 2008	
13. Manufacturer and Model Number:		TBD				
14. ID(s) of Emission Unit Controlled:		9-Chlorosilan	e Venting Syster	n		
15. Is operating schedule different tha units(s) involved?	n emission	☐ Yes	☑ No			
16. Does the manufacturer guarantee efficiency of the control equipment?	the control	☐ Yes 🛭	☑ No (If Yes, at	tach and label m	anufacturer guarante	e)
efficiency of the control equipment?				Pollutant Cont	rolled	
	PM	PM10	SO ₂	NOx	voc	со
Control Efficiency						
17. If manufacturer's data is not availa	able, attach a s	eparate sheet	of paper to prov	ide the control ed	uipment design spec	ifications and performance data
to support the above mentioned control						
EMISSI	O TINU NC	PERATING	SCHEDULE	(hours/day,	hours/year, or o	ther)
18. Actual Operation	8,760 HR/	ΥR	resident and an arministration	e de la companya de La companya de la co		
19. Maximum Operation	8,760 hr/yı		Angeles and a series of			
		RI	EQUESTED I	_IMITS		
20. Are you requesting any permit li	mits?	Yes 🗵	No (If Yes, che	ck all that apply b	pelow)	
Operation Hour Limit(s):			ing and the second			
☐ Production Limit(s):	77					
☐ Material Usage Limit(s):						
☐ Limits Based on Stack Testir	ng Plea	se attach all r	elevant stack tes	ting summary rep	oorts	
Other:		212.144	ing in the second of the secon			
21. Rationale for Requesting the Lir	nit(s):	,,			A STATE OF THE STA	

PERMIT TO CONSTRUCT APPLICATION

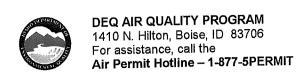
Revision 3 03/27/07

Please see instructions on page 2				1011		
			DENTIFICAT	ION		ID N
Company Name:		Facility N			- 1	/ ID No:
Hoku Materials, Inc.		Polysilico	·		005-0	
Brief Project Description:					silicon Produc	
EMISS	IONS U	NIT (PROC	ESS) IDENT	FICATION &	DESCRIPTIO	N
Emissions Unit (EU) Name:	CHLOR	OSILANE VEN	TING SYSTEM			1
2. EU ID Number:	9					
3. EU Type:	□ New 図 Modi	Source ication to a Pe	Unpermitted Exermitted Source	isting Source - Previous Permi	t#:P-2007-0075	Date Issued: 8/14/07
4. Manufacturer:	TBD					
5. Model:	TBD					
6. Maximum Capacity:	TBD			<u> </u>		
7. Date of Construction:	MAY 1,	2008				
8. Date of Modification (if any)	MAY 1,					
9. Is this a Controlled Emission Unit?	□ No				If No, go to line 18	3.
			,	EQUIPMEN		
10. Control Equipment Name and ID:		Lab Scrubber				
11. Date of Installation:		8/14/07	12. Date of Mod	dification (if any):	May 1, 2008	
13. Manufacturer and Model Number:		TBD				
14. ID(s) of Emission Unit Controlled:		8- Laboratory	Venting System			
15. Is operating schedule different than er units(s) involved?	nission	☐ Yes	☑ No			
16. Does the manufacturer guarantee the	control	☐ Yes 🖸	☑ No (If Yes, at	tach and label ma	anufacturer guarar	itee)
efficiency of the control equipment?				Pollutant Cont	rolled	
	PM	PM10	SO ₂	NOx	voc	со
Control Efficiency						
17. If manufacturer's data is not available	attach a	eparate sheet	of paper to prov	ide the control eq	uipment design s	pecifications and performance data
to support the above mentioned control et						
EMISSION	UNIT O	PERATING	SCHEDULE	(hours/day,	hours/year, o	rother)
18. Actual Operation	8,760 HR/	YR				
19. Maximum Operation	8,760 hr/y	Ť.				
		RI	EQUESTED L	IMITS		
20. Are you requesting any permit limits	? 🗆	Yes ⊠ I	No (If Yes, che	ck all that apply b	oelow)	
☐ Operation Hour Limit(s):						
☐ Production Limit(s):						
☐ Material Usage Limit(s):						
☐ Limits Based on Stack Testing	Plea	ase attach all r	elevant stack tes	ting summary rep	oorts	
☐ Other:		And the second second second second				
21. Rationale for Requesting the Limit(s	s):	A STATE OF THE STA				



Revision 3 03/27/07

Fledse 300 mondenene en page		16	DENTIFICAT	ON		
				ON	Facilit	y ID No:
Company Name:		Facility N				
Hoku Materials, Inc.		Polysilico		and the second of the second	005-0	
Brief Project Description:		11, 300 11, 11, 11			silicon Produc	
EMISS	IONS U	NIT (PROC	ESS) IDENTI	FICATION &	DESCRIPTIO	N
1. Emissions Unit (EU) Name:	Lime Sto	rage Silo				
2. EU ID Number:	6					
3. EU Type:	□ New : ☑ Modif	Source ication to a Pe	Unpermitted Ex rmitted Source	sting Source Previous Permi	:#:P-2007-0075	Date Issued: 8/14/07
4. Manufacturer:	TBD					- Company of the Comp
5. Model:	TBD					
6. Maximum Capacity:	900 CU.	FT.				
7. Date of Construction:	5/1/08					
8. Date of Modification (if any)	MAY 1, 2					
9. Is this a Controlled Emission Unit?	□ No				If No, go to line 1	8
		EMISSION	S CONTROL	EQUIPMEN	<u> </u>	
10. Control Equipment Name and ID:		Lime Storage	Silo Baghouse	CE ID No:6		
11. Date of Installation: 5/1/08 12. Date of Modification (if any): May 1, 2008						
13. Manufacturer and Model Number: TBD						
14. ID(s) of Emission Unit Controlled: 6- Lime Storage Silo						
15. Is operating schedule different than er units(s) involved?	nission	☐ Yes 🗵	3 No			
16. Does the manufacturer guarantee the	control	☐ Yes 🗵	No (If Yes, att	ach and label m	anufacturer guara	ntee)
efficiency of the control equipment?				Pollutant Cont	rolled	
	PM	PM10	SO ₂	NOx	voc	СО
Control Efficiency 0.02	gr/dscf	0.02 gr/dscf				
17. If manufacturer's data is not available, to support the above mentioned control ef	attach a s	eparate sheet Equipment sel	of paper to provi lected will meet a	de the control ed above mentioned	juipment design s control efficiency	pecifications and performance data
					hours/year, o	
	8,760 HR/	Tanana	,			
10. Attended to be a second	8,760 hr/yı					
19. Maximum Operation	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		QUESTED L	IMITS	·	
20. Are you requesting any permit limits	? 🔲			ck all that apply l	pelow)	
☐ Operation Hour Limit(s):						
☐ Production Limit(s):						
☐ Material Usage Limit(s):						
☐ Limits Based on Stack Testing	Plea	ise attach all re	elevant stack tes	ting summary re	oorts	
Other:				av latta a ladja	Allera Made	
21. Rationale for Requesting the Limit(s	s):	No. 1	* * * * * * * * * * * * * * * * * * *		Allender in Allender	



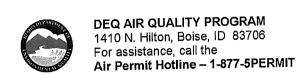
Revision 3 03/27/07

			IDENTIFICAT	ION		
Company Name:		Facility I	Name:		Facili	ty ID No:
Hoku Materials, Inc.		Polysilic	on Plant		005-0	00058
Brief Project Description:		Constru	ction of a 4,00	0 Mton/yr Pol	ysilicon Produ	ction Facility
	VISSIONS L	INIT (PRO	CESS) IDENT	IFICATION 8	DESCRIPTIO	DN
1. Emissions Unit (EU) Name:			NTING SYSTEM		and the second s	and the first of the second of the first partitions.
2. EU ID Number:	9				***	3 1 1
3. EU Type:	☐ New ☑ Mod	Source [fication to a P	☐ Unpermitted Exermitted Source	visting Source Previous Perm	it #:P-2007-0075	Date Issued: 8/14/07
4. Manufacturer:	TBD				THE STANDARD STANDARD	
5. Model: TBD						
6. Maximum Capacity:	TBD	100				
7. Date of Construction: MAY 1, 2008						
8. Date of Modification (if any) MAY 1, 2008						
9. Is this a Controlled Emission Unit?						
		EMISSION	NS CONTROL	_ EQUIPMEN	Т	1 14
10. Control Equipment Name and ID: Relief Vent Scrubber CE ID No:10						
11. Date of Installation:		8/14/07	12. Date of Mo	dification (if any):	May 1, 2008	
13. Manufacturer and Model Number: TBD						·
14. ID(s) of Emission Unit Controlled: 10-Relief Vent System						
15. Is operating schedule different th	an emission	☐ Yes 【	⊠ No			
units(s) involved? 16. Does the manufacturer guarante	e the control	☐ Yes	⊠ No (If Yes, at	tach and label m	anufacturer guara	intee)
efficiency of the control equipment?				Pollutant Con	trolled	
	PM	PM10	SO ₂	NOx	voc	СО
Control Efficiency						
17. If manufacturer's data is not available	lable attach a	L senarate shee	t of paper to prov	ide the control e	L guipment design s	specifications and performance data
to support the above mentioned con			, e, pape, p, - ,		,,	
		PERATING	SCHEDULE	(hours/day,	hours/year, c	or other)
18. Actual Operation	8,760 HR	12.15° - 1 11.11° 11.11		energy of the first energy		
19. Maximum Operation	8,760 hr/y	r				
			EQUESTED	LIMITS		
20. Are you requesting any permit	limits? ☐		No (If Yes, che		below)	
☐ Operation Hour Limit(s):						
☐ Production Limit(s):						
☐ Material Usage Limit(s):						
☐ Limits Based on Stack Test	ing Ple	ase attach all i	relevant stack tes	sting summary re	ports	
Other:	_		erita keten Ke			
21. Rationale for Requesting the L	.imit(s):		And A Secretary			
	```					

## PERMIT TO CONSTRUCT APPLICATION

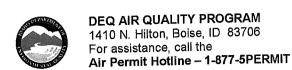
Revision 3 03/27/07

Please see instructions on page 2 before filling out the form.							
IDENTIFICATION							
Company Name:		Facility N	ame:		\ \ \	ty ID No:	
Hoku Materials, Inc.		Polysilico	n Plant		005-0	00058	
Brief Project Description:		Construc	tion of a 4,00	0 Mton/yr Poly	silicon Produ	ction Facility	
- EMIS	SIONS U	NIT (PROC	ESS) IDENTI	FICATION &	DESCRIPTIO	ON	
1. Emissions Unit (EU) Name:	M.G. Sili	on Bin				Andreas and a series of the Albert Control o	
2. EU ID Number:	3						
3. EU Type:	☐ New S ☑ Modif	Source   ication to a Per	Unpermitted Ex rmitted Source -	isting Source - Previous Permit	#:P-2007-0075	Date Issued: 8/14/07	
4. Manufacturer:	TBD						
5. Model:	TBD						
6. Maximum Capacity:	250 CU.	FT.					
7. Date of Construction: 5/1/08							
8. Date of Modification (if any)	Date of Modification (if any) MAY 1, 2008						
9. Is this a Controlled Emission Unit?	☐ No			ollowing section. I		8. · · · · · · · · · · · · · · · · · · ·	
				. EQUIPMENT	- Olympia de la compania del compania de la compania del compania de la compania del compania de la compania de la compania de la compania del compania de la compania della compania de la compania della compania dell	Stage of the Stage	
10. Control Equipment Name and ID:	M.G. Silicon B	in Vent Baghous					
11. Date of Installation:		5/1/08	12. Date of Mod	dification (if any):	May 1, 2008		
13. Manufacturer and Model Number: TBD							
14. ID(s) of Emission Unit Controlled:		3- M.G. Silicor	n Bin		**************************************		
15. Is operating schedule different than units(s) involved?	emission	☐ Yes 🗵	No				
16. Does the manufacturer guarantee th	e control	☐ Yes 🗵	No (If Yes, at	tach and label ma	nufacturer guara	intee)	
efficiency of the control equipment?				Pollutant Contr	olled		
	PM	PM10	SO ₂	NOx	VOC	со	
Control Efficiency 0.	02 gr/dscf	0.02 gr/dscf					
17. If manufacturer's data is not availab	le, attach a s	eparate sheet	of paper to prov	ide the control eq	uipment design s	specifications and performance data	
to support the above mentioned control	•			above mentioned			
EMISSIO	N UNIT O	PERATING	SCHEDULE	(hours/day, l	ours/year, c	or other)	
18. Actual Operation	8,760 HR/	/R				en der film in der eine der der eine der film film der ein der eine der eine der eine der eine gewenne der der Die Belover eine der eine ge	
19. Maximum Operation	8,760 hr/yı						
		RE	QUESTED L	_IIVIITS			
20. Are you requesting any permit lim	its?	Yes ⊠ N	lo (If Yes, che	ck all that apply b	elow)		
☐ Operation Hour Limit(s):							
☐ Production Limit(s):							
☐ Material Usage Limit(s):	N. F						
☐ Limits Based on Stack Testing	Plea	se attach all re	elevant stack tes	ting summary rep	orts		
☐ Other:							
21. Rationale for Requesting the Limi	t(s):						



Revision 3 03/27/07

Please see instructions on pa	90 - 20,000		DENTIFICAT	ON			
				ON	Facilit	y ID No:	
Company Name:		Facility N				y ID No:	
Hoku Materials, Inc.		Polysilico		All All	005-0		
Brief Project Description:		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			silicon Produc		
E	MISSIONS L	INIT (PROC	ESS) IDENTI	FICATION &	DESCRIPTIO	N	
1. Emissions Unit (EU) Name:	M.G. SI	ICON PRIMARY HOPPER					
2. EU ID Number:	4						
3. EU Type:	☐ New ☑ Modi	Source ☐ fication to a Pe	Unpermitted Ex rmitted Source -	isting Source · Previous Permit	#:P-2007-0075	Date Issued: 8/14/07	
4. Manufacturer:	TBD						
5. Model:	TBD						
6. Maximum Capacity:	15 CU.	FT.					
7. Date of Construction: 5/1/08							
8. Date of Modification (if any)	MAY 1,						
9. Is this a Controlled Emission Un	it? □ No				If No, go to line 1	3.	
		EMISSION	S CONTROL	. EQUIPMEN			
10. Control Equipment Name and ID	,	M.G. Silicon F	Л.G. Silicon Primary Hopper Filter CE ID No:4				
11. Date of Installation:	5/1/08	12. Date of Mod	lification (if any):	May 1, 2008	,		
13. Manufacturer and Model Number: TBD							
14. ID(s) of Emission Unit Controlled: 4- M.G. Silicon Primary Hopper							
15. Is operating schedule different thunits(s) involved?	an emission	☐ Yes 🗵	₫ No				
16. Does the manufacturer guarante	e the control	☐ Yes 🗵	No (If Yes, at	ach and label ma	nufacturer guara	ntee)	
efficiency of the control equipment?		1		Pollutant Conti	rolled		
	PM	PM10	SO ₂	NOx	VOC	со	
Control Efficiency	0.02 gr/dscf	0.02 gr/dscf					
17 If manufacturer's data is not ava	lable attach a	separate sheet	of paper to provi	de the control eq	uipment design s	l pecifications and performance data	
to support the above mentioned con	trol efficiency.	Equipment se	lected will meet a	above mentioned	control efficiency		
EMISS	ION UNIT O	PERATING	SCHEDULE	(hours/day, l	nours/year, o	r other)	
18. Actual Operation	8,760 HR	YR		45/37/12			
19. Maximum Operation	8,760 hr/y					Miles and Market and a self-con-	
		RI	EQUESTED L	IMITS			
20. Are you requesting any permit	limits?	Yes ⊠ I	No (If Yes, che	ck all that apply b	elow)		
☐ Operation Hour Limit(s):							
☐ Production Limit(s):							
☐ Material Usage Limit(s):							
☐ Limits Based on Stack Tes	ting Ple	ase attach all r	elevant stack tes	ting summary rep	oorts		
☐ Other:		90 T					
21. Rationale for Requesting the L	_imit(s):	The second se					



Revision 3 03/27/07

Please see instructions on page 2 before filling out the form.

Please see instructions on page			DENTIFICAT	ION		
				ION	Eggilit	y ID No:
Company Name:		Facility N			005-0	·
Hoku Materials, Inc.		Polysilico				
Brief Project Description:		1			silicon Produc	
EMI	SSIONS U	NIT (PROC	ESS) IDENT	FICATION &	DESCRIPTIO	N
1. Emissions Unit (EU) Name:	M.G. SIL	ICON SECON	DARY HOPPER			
2. EU ID Number:	5					
3. EU Type:	☐ New ☑ Modi	Source 🔲 fication to a Pe	Unpermitted Ex rmitted Source -	isting Source - Previous Permit	#:P-2007-0075	Date Issued: 8/14/07
4. Manufacturer:	TBD					
5. Model:	TBD			······································		
6. Maximum Capacity:	20 CU. I	₹Т.	i de la companya de			And the second s
7. Date of Construction:	5/1/08					
8. Date of Modification (if any)	MAY 1,					
9. Is this a Controlled Emission Unit?	□ No				If No, go to line 1	8
				. EQUIPMEN	and the second s	
10. Control Equipment Name and ID: M.G. Silicon Secondary Hopper Filter CE ID No:5						
11. Date of Installation:	5/1/08	12. Date of Mod	lification (if any):	May 1, 2008		
13. Manufacturer and Model Number: TBD						
14. ID(s) of Emission Unit Controlled:						
15. Is operating schedule different than units(s) involved?	n emission	☐ Yes 🏻	₫ No			
16. Does the manufacturer guarantee to	the control	☐ Yes 🗵	☑ No (If Yes, at	tach and label ma	nufacturer guara	ntee)
efficiency of the control equipment?				Pollutant Conti	rolled	
	PM	PM10	SO ₂	NOx	VOC	СО
Control Efficiency	0.02 gr/dscf	0.02 gr/dscf				
17. If manufacturer's data is not availa to support the above mentioned control	ble, attach a s	separate sheet Equipment se	of paper to prov lected will meet	ide the control eq above mentioned	uipment design s control efficiency	pecifications and performance data
EMISSIC	O TINU NO	PERATING	SCHEDULE	(hours/day, l	hours/year, o	r other)
18. Actual Operation	8,760 HR/	YR				
19. Maximum Operation	8,760 hr/y					
		RE	EQUESTED L	IMITS		
20. Are you requesting any permit lir	nits?	Yes ⊠1	No (If Yes, che	ck all that apply b	elow)	
☐ Operation Hour Limit(s):						
☐ Production Limit(s):			•			
☐ Material Usage Limit(s):						
☐ Limits Based on Stack Testin	g Plea	ase attach all re	elevant stack tes	ting summary rep	oorts	
Other:						
21. Rationale for Requesting the Lim	nit(s):					

n---

#### Emissions Units - Industrial Engine Information Form EU1



#### **PERMIT TO CONSTRUCT APPLICATION**

Revision 3 03/27/07

			DENTIFICATION				
Company Name:		Facility	Name:		Facility ID	No:	
Hoku Materials, Inc.		Polysi	licon Plant		005-0009	58	
Brief Project Description:		Const	ruction of a 4,000 M	ton/yr Po	lysilicon P	roduction Facility	
			EXEMPTION	•			
Please refer to	DAPA 58.0 hat are exem	1.01.222. ipt from 1	01.c and d for a list of the Permit to Construc	internal co t requirem	ombustion on the contract of t	engines	
EN	GINE (EMISS	ION UNI	T) DESCRIPTION AND	SPECIFIC	ATIONS		
1. Type of Unit:  New Un	nit	ermitted E it with Per	Existing Unit rmit #:P-2007.0075	Date Issued	d: 8/14/07		
2. Use of Engine: Normal Operation Emergency Back-up Other:							
3. Engine ID Number: 4. Rated Power:							
EU ID11 Emergency Generator 🗵 800 Brake Horsepower(bhp)					500 Kilowatt	s(kW)	
5. Construction Date:	Construction Date: 6. Manufacturer:			7. Model			
May 1, 2008	TBD			TBD			
8. Date of Modification (if applicable): 9. Serial Number (if available):			10. Cont	rol Device (i	f any):		
May 1, 2008	NA NA			NA			
	FUEL	. DESCR	IPTION AND SPECIFIC	ATIONS			
11.	⊠ Diesel F	=uel (# )	☐ Gasoline Fuel	☐ Nat	ural Gas	Other Fuels	
Fuel Type	(gal/h	r)	(gal/hr)	(cf/	/hr)	(unit: )	
12. Full Load Consumption Rate	14.9						
13. Actual Consumption Rate	14.9						
14. Sulfur Content wt%	0.5%		N/A		/A		
			ING LIMITS & SCHEDU	JLE			
15. Imposed Operating Limit	s (hours/year	, or gallor	ns fuel/year, etc.):				
16. Operating Schedule (hou	ırs/day, montl	hs/year, e	tc.):		4		



#### PERMIT TO CONSTRUCT APPLICATION

Revision 3 03/27/07

Please see instructions on page 2 before filling out the form.

			IDENTIFICATION				- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	
Company Name:		Facility	Name:			Facility ID		
Hoku Materials, Inc.		Polys	ilicon Plant			005-000	)58	
Brief Project Description:		Const	ruction of a 4,0	00 Mtor	/yr Pol	ysilicon l	Production Facility	
			EXEMPTION					
			01.c and d for a li the Permit to Cor				engines	
EN	GINE (EMIS	SSION UNI	T) DESCRIPTION	AND SP	ECIFIC	ATIONS	1975 1975	
1. Type of Unit:  New U			Existing Unit rmit #:P-2007.007	5 Date	e Issued	: 8/14/07		
2. Use of Engine:   Norma	Operation	⊠ Emer	gency 🔲 Back-u	ıp 🗌 O	ther:			
3. Engine ID Number: 4. Rated Power:								
EU ID11 Emergency Generator			er(bhp)		3,500 Kilov	vatts(kW)		
5. Construction Date:	6	6. Manufacturer:			. Model:			
May 1, 2008		TBD			TBD			
8. Date of Modification (if applicable): 9. Seria			erial Number (if available): 10. Con			ol Device	(if any):	
May 1, 2008	008 NA			NA NA				
	FUE	EL DESCR	IPTION AND SPE	CIFICAT	IONS			
11.	⊠ Diese	l Fuel (#)	☐ Gasoline Fu	ıel	☐ Natu	ıral Gas	Other Fuels	
Fuel Type	(gal/	/hr)	(gal/hr)		(cf/l	nr)	(unit: )	
12. Full Load Consumption Rate	87	.2						
13. Actual Consumption Rate	87	.2						
14. Sulfur Content wt%	0.5	%	N/A		N/.	<b>A</b> (1)		
		OPERAT	ING LIMITS & SC	HEDULE				
15. Imposed Operating Limit	s (hours/yea	ar, or gallor	ns fuel/year, etc.):			,·		
16. Operating Schedule (hou	ırs/day, mor	nths/year, e	etc.):		· .	4.1. 3.43		

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#### DEQ AIR G 1410 N. Hill For assista

#### DEQ AIR QUALITY PROGRAM 1410 N. Hilton, Boise, ID 83706 For assistance, call the Air Permit Hotline — 1-877-5PERMIT

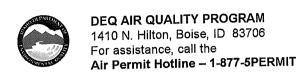
#### PERMIT TO CONSTRUCT APPLICATION

Revision 3 04/02/07

	IDENTIF	ICATION		
Company Name:	Facility Name:		Facility ID N	lo:
Hoku Materials, Inc.	Polysilicon Plar	ut Name (School)	005-00058	A STATE OF THE STA
Brief Project Description:	Construction of	a 4,000 Mton/yr Po	lysilicon Production	Facility
	TOWER IDENTIFI	CATION AND DESC	CRIPTION	
	Tower 1	Tower 2	Tower 3	Tower 4
Emission Unit Name	Colling Tower			
2. Emission Unit ID Number	7			
3. Stack/Vent ID Number	7			1945 1
4. Tower Type (N: New, U: Unpermitted, M: Modification)	⊠ N, □ U, □ M	□ N, □ U, □ M	□ N, □ U, □ M	□ N, □ U, □ M
5. Current Permit Number	P-2007.0075			
6. Tower Construction Date	August 14, 2007			
7. Tower Manufacturer	TBD			
8. Tower Model Number	TBD			
9. Number of Cells in Tower	6			
10. Tower Maximum Water Flow Rate	10,000 gpm/cell			
11. Measured TDS Content (if known)	12,000 ppm			
12. Do you use additives in the water? If Yes, provide an MSDS form for each additive	□ No ⊠ Yes	□ No □ Yes	□ No □ Yes	□ No □ Yes
C		ENT INFORMATIO		
13. Control Equipment	☐ No ☐ Yes	□ No □ Yes	□ No □ Yes	☐ No ☐ Yes
14. Control Equipment ID Number				
15. Control Equipment Efficiency				
	A CONTRACT OF THE PARTY OF THE	SCHEDULE		
16. Actual Operation (hours per year)	8,760			
17. Maximum Operation (hours per year)	8,760		ASSESSED OF THE SEC	And Calendary (1) And Calendary
		RMIT LIMITATIONS  f Yes, fill in all that a		
18. Are you requesting any permit limits?  Tower Served Operation Hour Limits:	ГDS Limits (ppm):	Material Usag		
	TDO LITTIES (PPITT):	The second code	go Linne. Othor:	
Tower 1			ELMANDALISMA SERIO EL DESALTO DE LA CONTRACTOR DE LA CONT	
Tower 2 Tower 3				
Tower 4				
19. Rationale for Requesting the		114,244,1	anna aktoraka jiya N	

Emissions Units - Cooling Towers Information Form EU	Emissions	Units - Cooling	a Towers	Information	Form	EU	4
------------------------------------------------------	-----------	-----------------	----------	-------------	------	----	---

	<del>마이크 현기 및 대한민국 기계에 되어야 된다. 이 전기 회원 회사 전기 회사 기계 </del>
Limit(s):	
L	



Revision 3 03/27/07

		IDENTIFICATION	N					
Company Name:	Faci	lity Name:		Facility ID No	): 			
Hoku Materials, Inc.	Poly	silicon Plant		005-00058				
Brief Project Description:	Con	struction of a 4,000	Facility ID No: 005-00058  0 Mton/yr Polysilicon Production Facility  I at are exempt from Permit to Construct  ON AND SPECIFICATIONS  Modification to a Unit with Permit #:P-2007.007  Ce Heat					
		EXEMPTION						
	222 for a list of ind	ustrial boilers that	are exempt from	Permit to Co	nstruct			
requirements.		NIT) DECORIDEIO	N AND SPECIFIC	ATIONS				
	`				** #*D 2007 0075			
1. Type of ☐ New U Request:	Jnit Unpermitte							
<ul><li></li></ul>	ed For Process :	% Used For Space	Heat 🗌 % Use	ed For Genera	ting Electricity			
3. Boiler ID Number: EU II	D 1 4. Rated	Capacity: 🛭 55 N						
5. Construction Date: May	1, 2008 6. Manu	6. Manufacturer: TBD 7. Mode			el: TBD			
8. Date of Modification (if ap	plicable): 9. Serial NA	Number (if availab	Note: Att	Note: Attach applicable control				
	FUEL DESC	CRIPTION AND SP	ECIFICATIONS					
11. Fuel Type	☐ Diesel Fuel (#	: ) 🛛 Natural	Gas 📗 C	oal	☐ Other Fuels			
,	(gal/hr)	(cf/hr	) (unit:	/hr)	(unit: /hr)			
12. Full Load Consumption Rate		52,38	1.					
13. Actual Consumption Rate		52,38	1					
14. Fuel Heat Content (Btu/unit, LHV)		1,050						
15. Sulfur Content wt%		NA						
16. Ash Content wt%		N/A						
	STEAM DES	CRIPTION AND S	PECIFICATIONS					
17. Steam Heat Content	NA	NA NA						
18. Steam Temperature (°F)	N/A	N/A						
19. Steam Pressure (psi)	N/A	N/A						
20. Steam Type	N/A	N/A	. I Si	aturated iperheated	☐ Saturated ☐ Superheated			
	OPER	ATING LIMITS & S	CHEDULE					

#### Emissions Units - Industrial Boiler Information Form EU5

- 21. Imposed Operating Limits (hours/year, or gallons fuel/year, etc.): NA
- 22. Operating Schedule (hours/day, months/year, etc.): 8,760 hr/yr



## PERMIT TO CONSTRUCT APPLICATION

Revision 3 03/27/07

		IDE	NTIFICATION			142 3		
Company Name:		Facility Na			Facility ID	No:		
Hoku Materials, Inc.		Polysilicor	ı Plant		005-00058			
Brief Project Description:		Constructi	on of a 4,000 Mton/yr	r Polysilicon	Production	Facility		
			XEMPTION					
Please see IDAPA 58.01.01.	222 for a l	ist of industria	Il boilers that are ex	empt from I	Permit to C	Construct		
requirements.			DECODINE AND	ODEOJEJO A	TIONS			
			DESCRIPTION AND					
1. Type of New l Request:	Jnit 📙 L	Inpermitted Exi	sting Unit   Modific	cation to a U	nit with Pe	rmit #:P-20	07.0075 	
<ul><li>∠ % Us</li><li>2. Use of Boiler: ☐ Other</li></ul>	ed For Pro :	cess 🗌 % Us	sed For Space Heat	☐ % Used	l For Gene	rating Elect	ricity	
Boiler ID Number: EU I Oil Heater	D 2- Hot	4. Rated Capa	Rated Capacity: S 5 Million British Thermal Units Per Hour (MMBtu/hr)  1,000 Pounds Steam Per Hour (1,000 lb steam/hr)					
5. Construction Date: May	6. Manufacture	7. Model:	7. Model: TBD					
8. Date of Modification (if ap	9. Serial Numi	10. Contro	10. Control Device (if any): Na					
NA		NA		Note: Attach applicable control equipment form(s)				
	Fl	JEL DESCRIPT	TON AND SPECIFIC	ATIONS				
11. Fuel Type	☐ Dies	sel Fuel (# )	⊠ Natural Gas	□ Co	al	☐ Oth	er Fuels	
		(gal/hr)	(cf/hr)	(unit:	/hr)	(unit:	/hr)	
12. Full Load Consumption Rate			52,381					
13. Actual Consumption Rate			52,381					
14. Fuel Heat Content (Btu/unit, LHV)			1,050			N N		
15. Sulfur Content wt%			NA					
16. Ash Content wt%			N/A					
	ST	EAM DESCRIP	TION AND SPECIFIC	CATIONS				
17. Steam Heat Content		NA	NA					
18. Steam Temperature (°F)		N/A	N/A					
19. Steam Pressure (psi)		N/A	N/A					
20. Steam Type		N/A	WA		urated erheated		urated perheated	
		OPERATING	G LIMITS & SCHEDU	JLE				

- 21. Imposed Operating Limits (hours/year, or gallons fuel/year, etc.): NA
- 22. Operating Schedule (hours/day, months/year, etc.): 8,760 hr/yr



#### PERMIT TO CONSTRUCT APPLICATION

Please see instructions on page 2 before filling out the form.

Company Name: Hoku Materials, Inc
Facility Name: Polysilicon Plant

Facility ID No.: 005-00058

Brief Project Description: Construction of a 4,000 Mton/yr Polysilicon Production Facility

Brief Project Description		-	/i Polysilicon Pro					
	SUM	MARY OF AIR	IMPACT ANAL	YSIS RESULTS	S - CRITERIA PO	DLLUTANTS		
		1.		2.	3.	4.		5.
Criteria Pollutants	Averaging Period	Significant Impact Analysis Results (µg/m3)	Significant Contribution Level (µg/m3)	Full Impact Analysis Results (µg/m3)	Background Concentration (µg/m3)	Total Ambient Impact (µg/m3)	NAAQS (μg/m3)	Percent of NAAQS
PM ₁₀	24-hour		5	45.30	94.60	139.90	150	93%
	Annual		1	9.60	25.00	34.60	50	69%
SO ₂	3-hr		25	86.30	34.00	120.30	1300	9%
	24-hr		5	24.90	26.00	50.90	365	14%
	Annual		1	0.50	8.00	8.50	80	11%
NO ₂	Annual		1	8.20	32.00	40.20	100	40%
00	1-hr		2000	464.00	5,000.00	5,464.00	40000	14%
CO	8-hr		500	136.00	2,000.00	2,136.00	10000	21%



#### PERMIT TO CONSTRUCT APPLICATION

Revision 3 3/27/2007

Please see instructions on page 2 before filling out the form.

Company Name: Hoku Materials, Inc Facility Name: Polysilicon Plant Facility ID No.: 005-00058

Brief Project Description:	Construction of	f a 4,000 Mton/	yr Polysilicon P	roduction Faci	ility					
POINT SOURCE STACK PARAMETERS										
1.	2.	3a.	3b.	4.	5.	6.	7.	8.	9.	10.
Emissions units	Stack ID	UTM Easting (m)	UTM Northing (m)	Base Elevation (m)	Stack Height (m)	Modeled Diameter (m)	Stack Exit Temperature (K)	Stack Exit Flowrate (acfm)	Stack Exit Velocity (m/s)	Stack orientation (e.g., horizontal, rain cap)
Point Source(s)										
Boiler	1	377688.0	4750349.0	1353.6	6.1	0.91	478	20000	14.3	Horizontal
Hot Oil Heater	2	377679.0	4750356.0	1353.3	6.1	0.91	478	20000	14.3	Horizontal
M.G. Silicon Bin Vent	3	377463.0	4750554.0	1350.7	7.3	0.15	293	800	20.7	Horizontal
M.G. Silicon Primary Hopper	4	377460.0	4750520.8	1349.7	19.8	0.05	293	200	44.8	Horizontal
M.G. Silicon Secondary Hopper	5	377470.0	4750519.0	1350.0	18.3	0.05	293	150	33.6	Horizontal
Lime Storage Silo	6	378143.0	4750055.0	1353.0	6.1	0.30	293	1200	7.8	Horizontal
Cooling Tower 1	7	377558.5	4750476.0	1354.1	9.1	10.67	302		5.3	Horizontal
Cooling Tower 2	7	377566.0	4750487.5	1354.5	9.1	10.67	302		5.3	Horizontal
Cooling Tower 3	7	377574.0	4750500.0	1354.3	9.1	10.67	302		5.3	Horizontal
Laboratory Venting System	8	377923	4750113	1352.6	6.1	0.30	293	2600	16.8	Horizontal
Chlorosilane Venting System	9	377618	4750300	1352	8.2	0.36	293	3200	15.1	Horizontal
Relief Vent System	10	377646	4750273	1352.1	8.2	0.36	293	3200	15.1	Horizonta
Emergency Generator	11	377521	4750503	1352.4	7.9	0.61	700	21000	34.0	Horizonta
Fire Water Pump	12	378118	4750038	1353	6.1	0.30	700	4500	29.1	Horizontal
			-							
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										4000
(insert more rows as needed)										



#### PERMIT TO CONSTRUCT APPLICATION

Revision 3 4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name:	Hoku Materials, Inc
Facility Name:	Polysilicon Plant

Facility ID No.: 005-00058

Brief Project Description:	Construction of	a 4,000 Mton/yr	Polysilicon Prod							
	FUGITIVE SOURCE PARAMETERS									
1.	2.	3a.	3b.	4.	5.	6.	7.	8.	9.	10.
Emissions units	Stack ID	UTM Easting (m)	UTM Northing (m)	Base Elevation (m)	Release Height (m)	Easterly Length (m)	Northerly Length (m)	Angle from North (°)	Initial Vertical Dimension (m)	Initial Horizontal Dimension (m)
Area Source(s)										
HCL from Valves	13	377,686	4,750,248	1,350.30	1.52	45.72	51.82	35.00	2.44	
										m
				****	<u> </u>					
Volume Source(s)										, second in
		11800						45.11		
										****
(insert more rows as needed)										



DEQ AIR QUALITY PROGRAM 1410 N. Hilton, Boise, ID 83706 For assistance, call the

Air Permit Hotline - 1-877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Revision 3 4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name: Hoku Materials, Inc
Facility Name: Polysilicon Plant
Facility ID No.: 005-00058

Brief Project Description: Construction of a 4,000 Mton/yr Polysilicon Production Facility

,	BUILDING AND STRUCTURE INFORMATION							
1.	2.	3.	4.	5.	6.	7.		
Building ID Number	Length (ft)	Width (ft)	Base Elevation (m)	Building Height (m)	Number of Tiers	Description/Comments		
POSTPROC	180.00	168.00	1354.00	3.6576	1	Post Processing Building		
POLYROOM	200.00	100.00	1353.00	24.384	1	Poly Building		
COOLTWOR	65.00	216.00	1353.00	9.144	1	Cooling Tower		
DMWATER	103.00	148.00	1353.00	5.49	1	D.M. Water Building		
SHIPWRHS	123.00	186.00	1353.00	6.096	1	Shipping Warehouse		
PUMPHS12	44.00	79.00	1353.00	3.66	1	Pump House 1 and 2		
WWTREAT	38.00	82.00	1353.00	3.66	1	Waste Water Treatment Building		
SUPERSAC	72.00	56.00	1350.30	6.10	1	Super Sack Staging		
GDHOUSE	50.00	23.00	1350.60	3.66	1	Guard House		
MNTWRHS	138.00	79.00	1351.90	10.36	1	Maintenance and Warehouse		
BLRBLDG	23.00	32.80	1353.20	5.49	1			
BRCHLLRS	60.00	72.00	1352.90	6.10	1	Brine Chillers		
ADMIN	72.00	33.00	1349.92	22.86	1	Administration Building		
LAB	115.00	66.00	1350.43	3.05	1	TCS Lab		